

Following are brief descriptions of the clam species found during 1999-2000 intertidal sampling. This is not intended to be a complete listing of the species found in Glacier Bay National Park and Preserve.



*Clinocardium nuttallii* (CLN), heart cockle. This clam can grow to 140 mm and is found intertidally to 30 m in sand/gravel substrates (One source states 200 m). The heart cockle can live 15 years although some estimates are as high as 19 years. It is found in sheltered waters from the southern Bering Sea to San Diego, California.



*Entodesma navicula* (ENN), ugly clam. This clam can grow to lengths over 100 mm. It is found in crevices or under rocks intertidally to depths of 20 m. Its range is from the southern Bering Sea to Point Conception, California. The ugly clam cannot completely retract its siphon therefore there is a gape in the shell.



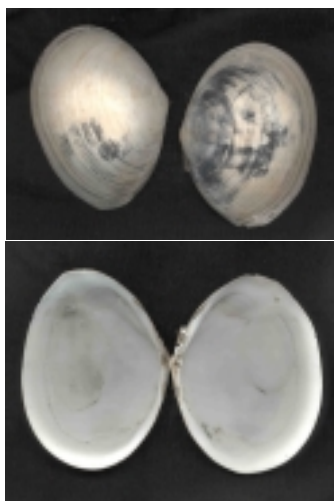
*Gari californica* (GAC), California sunset clam. This clam can grow to 149 mm and is found intertidally to 170 m in gravel substrates. *G. californica* is rare in the intertidal zone of Glacier Bay. Its range extends from the northern Gulf of Alaska to Baja California Sur.



*Hiatella arctica* (HIA) Arctic hiatella clam. The Arctic hiatella can grow to 33 mm and is found intertidally to 800 m. This clam attaches itself with a byssus to rocks, mussels, shell litter, and even alga. It is often found in areas of unconsolidated rocky substrates from Point Barrow, Alaska to Chile. *Hiatella pholadis* grows to 50 mm and is found intertidally to 10 m, from the Bering Sea to Puget Sound. It attaches itself with byssus threads to kelp holdfasts, mussel mats, and pholad (piddock) burrows. *H. arctica* and *H. pholadis* were grouped as *Hiatella* species (HIS) in this study.



*Humilaria kennerleyi* (HUK), Kennerley's venus. This clam is found intertidally to 40 m in sand/gravel substrates. It grows to 100 mm and its range is from Cook Inlet, Alaska to Santa Rosa Island, California. *Humilaria* was rare in our intertidal sampling in Glacier Bay.



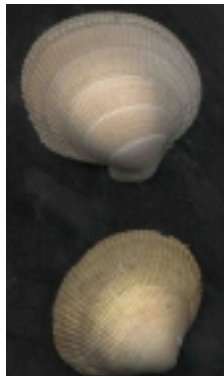
Numerically, *Macoma* is the predominate intertidal clam in Glacier Bay. Several species have been identified during our sampling: *Macoma nasuta* (MAN), *M. balthica* (MAB), *M. calcarea* (MAC), *M. inquinata* (MAI), and *M. obliqua* (MAO). *M. nasuta* is referred to as the bent-nosed macoma and is found intertidally to 50 m in sandy or silty substrates. It can grow to 110 mm and ranges from Cook Inlet, Alaska to Baja California Sur. *M. balthica* is found intertidally to 40 m. and only grows to 38 mm. Its range is from the Beaufort Sea to San Diego, California. *M. balthica* is often found in bays and estuaries in fine sediments, occasionally at high densities. The other species of *Macoma* have not been identified in the field, but in core samples sent to a bivalve taxonomic specialist.



*Mya truncata* (MYT) and *Mya arenaria* (MYA), softshell clams; grouped as *Mya* species (MYS). *M. truncata* grows to 80 mm while *M. arenaria* grows to 100 mm. MYT is found intertidally to 100 m, ranging from the Beaufort Sea to Neah Bay, Washington. MYA is found intertidally (subtidal depths were not given for MYA) from Icy Cape, Alaska to central California. They are found in substrates with sand/mud (e.g. in the interstitial sediments at an unconsolidated rocky site).



*Panomya ampla* (PAA), ample roughmya. This clam is sometimes mistaken for a juvenile geoduck. It is found intertidally to 100 m from Point Barrow, Alaska to Puget Sound in mud/sand/gravel substrates. It can grow to 70 mm. We found these clams near the entrance to Secret Bay in Glacier Bay.



*Protothaca staminea* (PRS), littleneck clam. This clam is found intertidally to 10 m and grows to 75 mm. *Protothaca* are usually found within the top 10 cm of rock/coarse gravel/sand/mud substrates. It occurs intertidally to 10 m from the Aleutian Islands to Baja California Sur. *Protothaca* can live 8 to 14 years. Growth rates can be 38 mm in 3-4 years.



*Pseudopythina compressa* (PSC), fuzzy clam. This clam is found intertidally to 100 m and grows to 20 mm. It is found from Point Barrow to Baja, California, usually in mud substrates.



*Saxidomus gigantea* (SAG), butterclam. The butterclam is found intertidally to 40 m. It can grow to 136 mm and is found in mixed substrates (sand/mud/gravel) from the southern Bering Sea to central California. These clams dominate the biomass of intertidal clams in Glacier Bay. *Saxidomus* can live for 20 years. Growth rates vary within its range. In the northern part of the range, SAG can grow 63 mm in 8-9 years; while in the southern areas, similar sizes are reached after only 4-5 years.

## REFERENCES

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